

IN THE CLAIMS

1. (previously presented) An image coding apparatus, comprising:

inputting means for inputting a multiplexed stream containing multimedia coding data;

separating means for separating a video stream from said input multiplexed stream;

converting means for performing a predetermined conversion process on said separated video stream to form a converted video stream;

generating means for generating additional information indicating that a mismatch will occur when said converted video stream is displayed on the basis of said multimedia coding data; and

outputting means for outputting said converted video stream, said multimedia coding data, and said additional information.

2. (original) The image coding apparatus according to claim 1, further comprising:

coding means for coding said additional information generated by said generating means as data separate from said multiplexed stream containing said converted video stream.

3. (original) The image coding apparatus according to claim 1, further comprising:

coding means for multiplexing said additional information generated by said generating means with said multiplexed stream containing said converted video stream and then coding a multiplexed result.

4. (original) The image coding apparatus according to claim 1, wherein said converting means converts a video stream picture frame parameter.

5. (previously presented) The image coding apparatus according to claim 1, wherein said conversion process includes

at least a process of decoding said separated video stream and a process of encoding said decoded video stream.

6. (previously presented) The image coding apparatus according to claim 1, wherein said additional information contains at least one of original picture frame information and an original screen aspect ratio.

7. (previously presented) The image coding apparatus according to claim 1, wherein said additional information generated by said generating means contains an original video format and a video format after said conversion process.

8. (previously presented) The image coding apparatus according to claim 1, wherein said additional information generated by said generating means contains an original screen aspect ratio and a screen aspect ratio after said conversion process.

9. (previously presented) The image coding apparatus according to claim 1, wherein said additional information contains at least one of information indicating whether a picture frame of said video stream has been converted by said converting means, information about an original picture frame of said separated video stream, and an original screen aspect ratio.

10. (previously presented) A method for image coding, comprising:

inputting a multiplexed stream containing multimedia coding data;

separating a video stream from said input multiplexed stream;

performing a predetermined conversion process on said separated video stream to form a converted video stream;

generating additional information indicating that a mismatch will occur when said converted video stream is displayed on the basis of said multimedia coding data; and

outputting said converted video stream, said multimedia coding data, and said additional information.

11. (previously presented) The image coding method according to claim 10, further comprising:

coding said additional information as data separate from said multiplexed stream containing said converted video stream.

12. (previously presented) The image coding method according to claim 10, further comprising:

multiplexing said additional information with said multiplexed stream containing said converted video stream and then coding a multiplexed result.

13. (previously presented) The image coding method according to claim 10, wherein said conversion process includes converting a video stream picture frame parameter.

14. (previously presented) The image coding method according to claim 10, wherein said conversion process includes at least a process of decoding said separated video stream and a process of encoding said decoded video stream.

15. (previously presented) The image coding method according to claim 10, wherein said additional information contains at least one of original picture frame information and an original screen aspect ratio.

16. (previously presented) The image coding method according to claim 10, wherein said additional information contains an original video format and a video format after said conversion process.

17. (previously presented) The image coding method according to claim 10, wherein said additional information contains an original screen aspect ratio and a screen aspect ratio after said conversion process.

18. (previously presented) The image coding method according to claim 10, wherein said additional information

contains at least one of information indicating whether a picture frame of said video stream has been converted with said conversion process, information about an original picture frame of said separated video stream, and an original screen aspect ratio.

19. (currently amended) A computer readable recording medium ~~recorded with~~ having a computer-executable instructions readable program for performing a method for coding image data, ~~image coding~~, said method program comprising:

inputting a multiplexed stream containing multimedia coding data;

separating a video stream from said input multiplexed stream;

performing a predetermined conversion process on said separated video stream to form a converted video stream;

generating additional information indicating that a mismatch will occur when said converted video stream is displayed on the basis of said multimedia coding data; and

outputting said converted video stream, said multimedia coding data, and said additional information.

20. (currently amended) ~~An information recording~~ A computer-readable medium having stored thereon a data structure comprising:

a data recording area containing data representing ~~recorded with~~ a video stream converted by a predetermined conversion process, multimedia coding data, and additional information representing indicating an occurrence of a display mismatch derived from a relationship between ~~when displaying~~ said converted video stream and ~~on the basis of~~ said multimedia coding data.

21. (currently amended) The computer-readable recording medium according to claim 20, wherein said additional information is coded and stored ~~recorded~~ as data different from

a multiplexed stream containing said converted video stream.

22. (currently amended) The computer-readable recording medium according to claim 20, wherein said additional information is coded and stored ~~recorded~~ as multiplexed with a multiplexed stream containing said converted video stream.

23. (currently amended) The computer-readable recording medium according to claim 20, wherein said video stream is converted in its picture frame parameter.

24. (currently amended) The computer-readable recording medium according to claim 20, wherein said video stream is decoded and then encoded.

25. (currently amended) The computer-readable recording medium according to claim 20, wherein said additional information contains at least one of original picture frame information and an original screen aspect ratio.

26. (currently amended) The computer-readable recording medium according to claim 20, wherein said additional information contains information about an original video format and information about a video format after said conversion process.

27. (currently amended) The computer-readable recording medium according to claim 20, wherein said additional information contains information about an original screen aspect ratio and information about a screen aspect ratio after said conversion process.

28. (currently amended) The computer-readable recording medium according to claim 20, wherein said additional information contains at least one of information indicating whether a picture frame of said video stream has been converted, information about an original picture frame of said video stream, and information about an original screen aspect ratio.

29-53. (cancelled)

54. (new) An image coding apparatus comprising:

a selector for receiving a multiplexed transport stream having multimedia coding data;

a demultiplexer operable to separate a video stream from the multiplexed transport stream;

a decoder for reproducing the video stream as decoded video data;

a coding generator operable to receive multimedia information associated with the multimedia coding data and generate display control information, the display control information including a mismatch flag which indicates that a display mismatch condition exists between the video data and multimedia coding data; and

an output unit operable to output the decoded video data, the multimedia coding data and the mismatch flag.

55. (new) The image coding apparatus of claim 54, further comprising an encoder coupled to the decoder and operable to reproduce the video stream based on the multimedia information associated with the multimedia coding data and the video data.

56. (new) The image coding apparatus of claim 54, wherein the output unit comprises a writing unit operable to record the decoded video data, the multimedia coding data and the mismatch flag onto a recording medium.

57. (new) The image coding apparatus of claim 54, further comprising a coding controller coupled between the selector and coding generator, the coding controller being operable to generate the multimedia information associated with the multimedia coding data.

58. (new) The image coding apparatus of claim 57, further comprising a data analyzer coupled between the selector and coding controller, the data analyzer being operable to detect at least a bit rate associated with the video stream.

59. (new) The image coding apparatus of claim 54, wherein the display control information includes a re-encode flag which indicates whether the video data is re-encoded.

60. (new) The image coding apparatus of claim 54, wherein the display control information includes a frame size change flag which indicates whether a size of a picture frame associated with the video data has been changed.